

THE OCCURRENCE OF AN AMERICAN GENUS IN EUROPE AND  
A EUROPEAN GENUS IN AMERICA (DIPTERA:  
SYRPHIDAE; SEPSIDAE):

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While I was visiting Herr Theodor Becker at his home in Leignitz, Germany, last July (1925), he gave me a male and female of a new species of *Chalcomyia*, a genus of Syrphidae hitherto known only from America, with his permission to describe and deposit the types in the U. S. National Museum. He has also determined for me specimens of a species of Sepsidae, *Amphipogon spectrum* Wahlberg, which my wife and I collected in Czecho Slovakia. A variety of the same species occurs in the northwestern part of America, but it has heretofore been known under the name of *Ambopogon hyperboreus* Greene.

The new species of *Chalcomyia* makes the sixth species for the genus and at the same time extends its range to the Old World. In a recent synopsis of the genus<sup>1</sup> attention was called to the fact that the subquadrate scutellum, the principal character upon which the genus was originally based, is peculiar only to the genotype *area* Loew, and in this paper other characters were used to define the genus. The present new species does not have the scutellum developed subquadrate but in all other respects it is essentially a member of *Chalcomyia*.

Since the above mentioned synopsis was published Mr. Curran has published a bulletin (Kansas Univ. Bull., vol. 15, 1925, p. 122) in which he describes and figures a new species of *Chalcomyia* from North America for which he erected a new subgenus, *Chalcosyrphus*. In the key given below all of the known species of the genus are included, as well as the new subgenus proposed by Curran.

**CHALCOMYIA** Williston

Third antennal joint suborbicular, with a dorsal, basal arista; mesonotal pile extending upon the humeral calli and the region between them; males with four abdominal segments; head triangular in frontal aspect; face black, usually deeply concave, tuberculate only in *cyanea*; a distinct petiole beyond the first posterior cell which is shorter than the discal crossvein; second vein distinctly curved upwards at its apical end; body pile normal; males dichoptic.

*Key to Species of Chalcomyia.*

- A1. Mesonotum and scutellum without a flattened area; second tergite very much broader than long; hind femur but little swollen.....

Subgenus *Chalcomyia* Williston.

<sup>1</sup> Shannon, The Genus *Chalcomyia*, Occasional Papers, Bost. Soc. of Nat. History, vol. 5, 1925, pp. 151-153.

- B1. Greenish bronze, clothed with short yellow pile; tibiae and tarsi largely yellow; scutellum subquadrate. Male: face without tubercle; eyes well separated, sides of front parallel on upper half.....  
*area* Loew.
- B2. Not greenish bronze or with yellow pile; only bases of tibiae yellow; scutellum not markedly subquadrate.
- C1. Discal crossvein joining discal cell distinctly before its middle; length of posterior crossvein much less than length of section of fourth vein above it.
- D1. Mesonotal pile pale. Male: Face with a slight tubercle....  
*cyanea* Smith.
- D2. Mesonotal pile blackish. Male: Face evenly concave.....  
*beckeri*, new species.
- C2. Discal crossvein joining discal cell nearly at its middle; posterior crossvein subequal to section of fourth vein above it. Male: Unknown.....  
*anomala* Shannon.
- A2. Mesonotum flattened on apical third, scutellum flattened on disc; second tergite quadrate; hind femur much swollen.....  
Subgenus *Chalcosyrphus* Curran.
- B1. Third antennal joint shorter than basal two combined. Male: Face without tubercle; eyes distinctly converging and rather closely approximated.....  
*depressa* Shannon.
- B2. Third joint longer than basal two combined. Male: Unknown.....  
*atra* Curran.

***Chalcomyia beckeri*, new species.**

*Male*.—Antennal prominence rather pronounced but less so than in other species of the genus; eyes fairly well separated; the front constricted at the middle, gradually widening above the constriction to the vertex and below widening more broadly downwards; front entirely shining black with a few hairs in ocellar region; antenna yellowish brown; arista darker, about one and one-third times the length of antenna and shorter than width of face across its middle; face black, extensively overlaid with silvery pollen; thorax black with blackish pile which is stiff and coarser along margins of mesonotum and scutellum; legs black, bases of all tibiae yellowish, lower surface of tarsi brownish, abdominal pile pale; basal corners of tergites extensively and faintly polinose; wings slightly tinged; squamae white; halteres yellow.

*Female*.—Front gradually widening downwards, width at vertex equal to length of antenna, width across base of antennae a little less than length of arista; face less polinose than in male; abdomen very broad and flat, pale pilose.

Length: 8.5 mm.; wing 8 mm.

Male, type, Wölfelsfall, Germany, May 17; female, allotype, Altwater, Moravia, June (Theodor Becker). Other specimens, of type series, in collection of Theodor Becker.

*Type*.—Cat. No. 28727, U. S. N. M.

The general appearance of *C. beckeri* is very similar to that of

the other species of the genus, except *depressa* and *atra*. The shape of the abdomen differs in each sex (exclude *depressa*), but in each case the appearance is quite characteristic and peculiar to the genus. The males of *area*, *cyanæa*, and *beckeri* have the abdomen broadening out very abruptly just beyond the base, and beyond the base of the third tergite it tapers rapidly to a rather sharp apex; the hypopygium is prominent and has a definite twist to the right.

The females of *area*, *anomala*, and *beckeri* have an unusually broad and flat abdomen.

This species is named for Theodor Becker, one of our foremost dipterologists. The writer wishes to express his appreciation to Mr. Becker for his generosity in permitting him to study this species.

Genus **AMPHIPOGON** Wahlberg.

*Amphipogon* Wahlberg, Ofvers. af Kongl. Ventensk. Akad. Förh., vol. 10, 1844, p. 217.

*Ambopogon* Greene, Proc. Ent. Soc. Washington, vol. 21, 1919, pp. 126-128, figures.—vol. 23, 1921, pp. 107-109.

*Genotype*.—*Amphipogon spectrum* Wahlberg, *ibid*.

***Amphipogon spectrum hyperboreus*** (Greene).

*Ambopogon hyperboreus* Greene, *ibid*.

The occurrence of this fly in North America was first made known in 1919, when Mr. C. T. Greene published a paper entitled "A New Genus of Scatophagidae" in which he described and figured a single male specimen which had been collected on the Alaska-Yukon border, latitude 69-10 North, longitude 141 West.

A year later the writer collected several males and a female on the forested slopes of Cedar Mountain, Idaho.

While collecting with Mrs. Shannon at Mezimesti, Czechoslovakia, August 2, 1925, to my great surprise, we found what appeared to be the same species of this very peculiar fly on a fallen fir log in one of the cultivated forests, strutting around in the same manner I had observed in the flies I collected on Cedar Mountain. Specimens were sent to Theodor Becker who determined them as *Amphipogon spectrum*. The male of the American specimens differ from the European specimens in having the hypopygial hairs consolidated into a single tuft, whereas in the European specimens of *spectrum* the hairs are divided by a well marked space making two tufts thereby.

The name *hyperboreus* is retained therefore as a varietal name for the American form, making the combination *Amphipogon spectrum hyperboreus* (Greene).